

AN ANNOTATED CHECKLIST OF ECHINODERMS COLLECTED FROM THE KAIKOURA
REGION AND KEPT IN THE REFERENCE COLLECTIONS OF THE EDWARD
PERCIVAL FIELD STATION KAIKOURA.

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ABSTRACT

54 species of Echinoderms collected from the Kaikoura region are listed. All specimens are kept in the Edward Percival Field Station collections.

KEYWORDS: Echinoderms, Checklist, Kaikoura.

INTRODUCTION

For the past 23 years Echinoderms have been collected, identified, and added to the reference collections at the Edward Percival Field Station. Many have been presented by local fishermen interested in knowing more about the environment they work in. Students and visiting researchers have also contributed to the collections in collecting and identifying specimens. No attempt has been made to describe the distribution of specimens. The Echinoid *Dermechinus horridus* (A. Agassiz) was considered to be rare when first identified by Dr A.N. Baker of the National Museum Wellington but when this was brought to the attention of Mr. T. Forbes, a Kaikoura fisherman, who had presented us with the specimen, he proceeded to collect a further 6 specimens in a period of one month and noted several occurrences of spines obviously of *D. horridus* amongst corals entangled in the nets.

Abbreviations are as follows: A.N.B. - A.N. Baker, D.L.P. - D.L. Pawson, D.McK. - D. McKnight, J.C.T. - J.C. Town, G.D.F. - G.D. Fenwick, I.M. - I. Mannering, W.C.C. - W.C. Clark, J.v.B. - J.v. Berkel, P.L.H. - P.L. Horn.

ECHINODERMATA

CRINOIDEA

ARTICULATA

Antedonidae

Florometra austinii A.M. Clark 1967

KA469C Coll: R. Warman, on downline 290 m, 27-2-77. Det: D.McK.

HOLOTHUROIDEA

DENDROCHIROTIDA

Cucumariidae

Neocucumella bicornuata Dendy and Hindle

KA507C Coll: W. Jones, in set net 300 m, Conway Rise, 29-7-81. Det: A.N.B.

Psolidiella sp

K423U Coll: from holdfast, Seal Reef, 3-9-64. Det: D.L.P.

Ocnus brevidentis Hutton

K422Q Coll: from holdfast, Seal Reef, 3-9-64. Det: D.L.P.

Chiridotidae

Kolostoneura novaezealandiae Dendy and Hindle

K313A Coll: Sugarloaf Point, 19-8-63. Det: D.L.P.

K896G Coll: in zostera, Mudstone Bay, South Bay, 7-5-66. Det: D.L.P.

Chiridota mortenseni Pawson 1962

K622A Coll: Kaikoura, 11-10-64, Det: D.L.P.

KA315 Coll: Woolloomooloo Channel, 23-5-75, Det: I.M.

MOLPADIDA

Caudinidae

Paracaudina chilensis Muller

KA400 Coll: in 200 m, south of Kaikoura, 12-4-71.

Stichopus mollis Hutton

K453A Coll: in 60 m, Kaikoura, 28-7-64.

ECHINOIDEA

CIDAROIDA

Cidaridae

Goniocidaris umbraculum Hutton 1872

KA056A Coll: R. Warman, on longline 320 m, South Point Kaikoura, 22-7-71. Det: A.N.B.

KA506M Coll: W. Jones, in set net 300 m, Conway Rise, 27-7-81. Det: J.v.B.

Goniocidaris parasol Fell 1958

KA253B Coll: K.J. Graham, in 150 m, off Point Gibson, 29-9-72. Det: A.N.B.

KA490H Coll: F. Wilson, trawled in 120 m, 15-1-64.

KA507B Coll: W. Jones, in set net 200 m, Conway Rise, 29-7-81. Det: A.N.B.

Ogmocidaris benhami Mortensen 1921

KA134E Coll: in 160-260 m, dredged off Point Gibson, 28-11-71. Det: J.C.T.

KA507Q Coll: W. Jones, in set net 300 m, Conway Rise, 29-7-81. Det: A.N.B.

Echinidae

Gracilechinus multidentatus H.L. Clark 1925

KA512T Coll: T. Forbes, in set net 1000 m, 11 miles off Kaikoura, 8-5-84.

Dermechinus horridus A. Agassiz

KA510F Coll: T. Forbes, in set net 300 m, Conway Rise, 14-6-83. Det: A.N.B.

KA510L Coll: T. Forbes, in set net 400 m, Conway Rise, 29-7-83. Det: J.v.B.

KA511A Coll: T. Forbes, in set net 440 m, Conway Rise, 17-8-83. Det: J.v.B.

Pseudechinus albocinctus Hutton 1872

KA508C Coll: K.J. Graham, in 60-80 m, 40 km North of Lyttelton, 26-8-71. Det: A.N.B.

Pseudechinus flemingi Fell 1958

KA510J Coll: T. Forbes, in set net 290 m, Conway Rise, 5-7-83. Det: J.v.B.

Pseudechinus huttoni Benham, 1908

KA134F Coll: in 160-260 m, off Point Gibson, 28-11-71.

KA507A Coll: W. Jones, in 300 m, Conway Rise, 21-7-81. Det: A.N.B.

Pseudechinus novaezelandiae Mortensen 1921

KA125 Coll: Woolloomooloo Channel, 1-8-68.

KA439 Coll: J. Town, south of Raramai tunnel, intertidal, 19-12-76. Det: J.C.T.

Evechinus chloroticus Valenciennes 1846

K266B Coll: south of Seal Reef, 27-4-63

KA126 Coll: Seal Reef, 1-8-68.

KA438 Coll: J. Town, Raramai Tunnels, 19-12-76. Det: J.C.T.

SPATANGOIDA

Spatangoidae

Spatangus multispinus Mortensen 1925

K601A Coll: on longline in 280 m, Goose Bay, 2-1-65.

KA120 Coll: from seawater tanks Edward Percival Field Station, Kaikoura, 1-11-71.

KA253 Coll: K.J. Graham, in 150 m, off Point Gibson, 29-9-72.

ASTEROIDEA

PAXILLOSIDA

Asteropectinidae

Persephonaster neozelanicus Mortensen 1925

KA134C Coll: in 150-250 m, off Point Gibson, 28-11-71. Det: J.C.T.

KA175E Coll: K. Graham, in 150-180 m, off Point Gibson, 5-1-72. Det: I.M.

Dipsacaster magnificus H.L. Clark

KA175D Coll: K. Graham, in 160-180 m, off Point Gibson, 5-1-72. Det: I.M.

Benthopectinidae

Benthopecten pikei M.E.S. Clark

KA512R Coll: T. Forbes, in set net 1000 m, 11 miles off Kaikoura, 8-5-84. Det: A.N.B.

VALVATIDA

Odontasteridae

Odontaster benhami Mortensen

KO61M Coll: D. Baxter, in 80 m, South Bay, 29-8-62. Det: D.L.P.

KA134E Coll: I. Mannering, in 260 m, East of Point Gibson, 28-11-71. Det: J.C.T.

Asterodon dilatatus Perrier

K659A Coll: Kaikoura, Det: D.L.P.

KA114 Coll: L. Bowring, Laboratory Rocks, 4-1-71.

KA176A Coll: L. Bowring, Laboratory Rocks, 1-12-71.

Eurygonias hylacanthus Farquhar

K816 Coll: Whalers Bay, 30-1-66. Det: I.M.

KA111 Coll: P. Staples, Avoca Point, 13-5-66. Det: A.N.B.

KA177A Coll: I. Mannering, Kaikoura, 1-12-71. Det: I.M.

KA512G Coll: Kaikoura, 2-3-84. Det: J.v.B.

Goniasteridae

Mediaster sladeni Benham

K659B Coll: Kaikoura, Det: D.L.P.

KA134Q Coll: I. Mannering, in 260 m, East of Point Gibson, 28-11-71.

KA260A Coll: L. Bowring, in 140 m, East of Point Gibson, 28-9-72.

KA263B Coll: L. Bowring, in 128 m, East of Point Gibson, 28-9-72.

Pentagonaster pulchellus Gray

KA266 Coll: L. Bowring, in 54 m, off Wairau Bar, 29-9-72.

SPINULOSIDA

Korethrasteridae

Peribolaster lictor Fell

KA490F Coll: Mr. Hutchingson, on Longline, off Kaikoura, 19-12-77. Det: J.C.T.

Asterinidae

Asterina aucklandensis Koehler

K824S Coll: Morgans Pool, Seal Reef, 19-1-66. Det: J.C.T.

KA030B Coll: J. Holleman, Armers Beach, 4-11-70.

KA478 Coll: J.C. Town, First Bay, 5-4-77. Det: J.C.T.

Patiriella regularis Verrill

KO61N Coll: D. Baxter, in 80 m, South Bay, 29-8-62.

K193A Coll: Laboratory Rocks, 28-1-63.

K331B Coll: N.E. off Seal Reef, 2-7-63.

Stegnaster inflatus Hutton

KA048A Coll: I. Mannering, Whalers Bay, 26-5-71. Det: I.M.

KA513J Coll: G.D. Fenwick, east off South Bay, 7-11-84. Det: G.D.F.

Echinasteridae

Henricia compacta Sladen

K323A Coll: D. Baxter, in 360 m, on anchor chain, Kaikoura, 20-8-63. Det: D.L.P.

FORCIPULATIDA

Asteriidae

Allostichaster insignis Farquhar 1895

KA049H Coll: K. Graham, in 80 m, Kaikoura, 28-5-71.

KA311 Coll: Christchurch Shell Club, 1-2-75. Det: I.M.

KA437 Coll: J.C. Town, 150 m south of Raramai Tunnel, 19-12-76. Det: J.C.T.

KA442 Coll: J.C. Town, between tunnels, south of Kaikoura, 21-12-76. Det: J.C.T.

Allostichaster polyplax Muller & Troschel

KA477 Coll: J.C. Town, Laboratory Rocks, 1-11-76. Det: J.C.T.

Astrostele scabra Hutton

K006R Coll: Laboratory Rocks, 6-5-62. Det: D.L.P.

K279B Coll: Moa Point, 27-5-63. Det: D.L.P.

K330A Coll: in 60 m, by oyster dredge, South Bay, 1-7-63.

KA146 Coll: Rhino Horns Point, 2-12-71.

KA441 Coll: J.C. Town, between tunnels south of Kaikoura, 21-12-76. Det: J.C.T.

Sclerasterias mollis Hutton 1872

K063J Coll: D. Baxter, in 180 m, South Bay, 29-8-62. Det: D.L.P.

KA049J Coll: K. Graham, in 80 m, Kaikoura, 28-5-71.

KA051K Coll: in 40 m, off Clarence Rivermouth, 10-6-71. Det: I.M.

KA507K Coll: W. Jones, in 300 m, off Haumuri Bluff, 29-7-81. Det: A.N.B.

Stichaster australis Verrill

K277C Coll: from Limestone Bay, South Bay, 24-5-63.

KA207 Coll: G.C.B. Poore, Whakatu Point, 12-6-68.

OPHIUROIDEA

OPHIURIDA

Gorgonocephalidae

Gorgonocephalus chilensis Philippi

K446A Coll: D. Baxter, deepwater, Kaikoura, 1-9-63.

KA303 Coll: R. Gibb, off Oaro, 13-10-74. Det: I.M.

KA463 Coll: M. Phillips, in 400 m, Haumuri Bluff, 20-11-77. Det: W.C.C.

KA506B Coll: W. Jones, in 300 m, Conway Rise, 27-7-81. Det: J.v.B.

Astrothorax waitei Benham 1909

KA134H Coll: I. Mannering, in 260 m, East of Point Gibson, 28-11-71. Det: A.N.B.

KA506C Coll: W. Jones, in 300 m, Conway Rise, 27-7-81. Det: A.N.B.

KA506D Coll: W. Jones, in 300 m, Conway Rise, 27-7-81. Det: A.N.B.

Astrothrombus rugosus H.L. Clark 1909

KA515R Coll: T. Forbes, in set net 400 m, Conway Rise, 17-8-83. Det: A.N.B.

Ophiomyxidae

Ophiomyxa brevirima H.L. Clark 1915

K412P Coll: from *Macrocystis* plant, Seal Reef, 3-9-64. Det: D.L.P.

KA503C Coll: First Bay, 14-5-79.

KA508B Coll: K.J. Graham, in 80 m, N.NE. off Lyttelton, 26-8-71. Det: A.N.B.

Ophiacanthidae

Ophiacantha levispina Lyman

K632C Coll: D. Baxter, in 480 m, Conway Rise, 19-10-64. Det: D.L.P.

Ophiacantha vilis Mortensen 1924

KA480D Coll: M. Phillips, in 400 m, Conway Rise, 16-4-77. Det: A.N.B.

Amphiuridae

Amphipholis squamata Delle Chiaje

K382P Coll: in 340 m, 1-7-63. Det: D.L.P.

K910A Coll: Morgans Pool, Seal Reef, 20-1-66. Det: A.N.B.

KA503V Coll: I.D. Marsden, South Bay, 20-12-79. Det: G.D.F.

Amphiura pusilla Farquhar

K412N Coll: from *Macrocystis* plant, Seal Reef, 3-9-64. Det: D.L.P.

Ophiactidae

Ophiactis sp.

K632D Coll: D. Baxter, in 480 m, Conway Rise. 19-10-64. Det: D.L.P.

Ophiactis resiliens Lyman 1882

KA029H Coll: B. Stephen, Armers Beach, 9-11-70. Det: J.C.T.

Ophiactis profundus novaezealandiae Mortensen 1924

K632K Coll: D. Baxter, in 480 m, Conway Rise, 19-10-64. Det: D.L.P.

Ophiothricidae

Clarkcoma bollonsi Farquhar 1908

KA134B Coll: I. Mannering, in 260 m, East of Point Gibson, 28-11-71. Det: A.N.B.

KA506E Coll: W. Jones, in 300 m, Conway Rise, 27-7-81. Det: A.N.B.

Ophiothrix aristulata Lyman 1882

KA506G Coll: W. Jones, in 300 m, Conway Rise, 27-7-81. Det: A.N.B.

KA507J Coll: W. Jones, in 300 m, Conway Rise, 27-7-81. Det: A.N.B.

Ophiocomidae

Ophiopteris antipodum E.A. Smith 1877

KA029E Coll: B. Stephen, Armers Beach, 9-11-70. Det: J.C.T.

KA473 Coll: J.C. Town, 10 km South of Kaikoura, 11-3-77. Det: J.C.T.

Ophiichitonidae

Ophionereis fasciata Hutton

KO69V Coll: Laboratory Rocks, 27-8-62. Det: D.L.P.

Ophiopeza gracilis Mortensen 1924

K412Q Coll: from *Macrocystis* plant, Seal Reef, 3-9-64. Det: D.L.P.

Ophiidermatidae

Ophiopeza maculata Verrill 1869

KA508V Coll: P.L. Horn, Armers Beach, 21-5-82. Det: P.L.H.

DISCUSSION

The list of echinoderms presented here, obviously is not exhaustive. Further, it represents animals which have actually been collected from the Kaikoura region and deposited within the E.P.F.S. reference collections (or transferred from there to National collections). As new material arrives at the Field Station, so the size of this list will grow. New additions undoubtedly will be rare, probably deep water species. The list, as it stands, serves to inform biologists of the known faunal composition of the Kaikoura region, and thus can be collected for research purposes. It forms part of a series of *Mauri Ora* articles cataloguing the fauna of the region. Other titles have listed the fishes (Francis, 1979; Roberts & van Berkel, 1982; Davison & van Berkel, 1985), ectoparasitic copepods of fish (Pilgrim, 1985), and polychaete worms (Knox et al, 1985). An unpublished list of seaweeds is available from the Field Station.

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